

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/816,381

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. *(Previously presented)* A process for recovering disturbed, digital optical signals, comprising:
 - converting the disturbed optical signals to disturbed electrical signals;
 - passing the disturbed electrical signals through a feedback decision circuit comprising at least two parallel-connected threshold decision elements to obtain decided signals;
 - using the decided signals and an estimated dispersion to generate synthetic, dispersive signals;
 - generating an error signal with the disturbed signals and the synthetic, dispersive signals, and
 - deriving setting parameters for setting the threshold decision elements in accordance with at least said error signal.

2. *(Currently amended)* ~~A~~ The process according to Claim 1, ~~characterised in that~~ wherein an analogue control stage determines the error signal ~~(10)~~ in accordance with an analogue procedure.

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3. *(Currently amended)* ~~A~~ The process according to Claim 12, ~~characterised in that~~ wherein the analogue control stage operates using a zero-forcing algorithm.

4. *(Currently amended)* ~~A~~ The process according to Claim 1, ~~characterised in that~~ wherein a pseudo-error monitor compares the disturbed optical signal with the decided signal and determines a pseudo-error therefrom.

5. *(Currently amended)* A feedback decision circuit ~~with~~ comprising:
an input for optically transmitted data reconverted into electronic signals, ~~with~~ at least two parallel-connected threshold decision elements, and ~~with~~ an analogue control stage for determining setting parameters for the threshold decision elements,
~~characterised in that~~ wherein ~~tappings are provided for deriving the a~~ tappings are provided for deriving the a ~~disturbed signal from the input and the a~~ disturbed signal from the input and the a ~~decided signal from the threshold decision elements, and that the~~ decided signal from the threshold decision elements, and that the analogue control stage contains a circuit for determining a synthetic, dispersive signal, and that the synthetic dispersive signal and the disturbed signal are fed to a circuit for determining an error signal and to a circuit for determining at least two of said setting parameters.

6. *(Currently amended)* ~~A~~ The feedback decision circuit ~~with an analogue control stage according to Claim 5, characterised in that~~ wherein the feedback decision circuit ~~with analogue control stage~~ is connected to a linear equalizer.

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7. *(Currently amended)* ~~A~~The feedback decision circuit according to Claim 6,
~~characterised in that~~wherein the linear equalizer standardizes the signal amplitude to 1 and the
analogue control stage is reduced to the derivation of the parameter B1.

8. *(Currently amended)* A feedback decision circuit according to Claim 5,
~~comprising with a pseudo-error monitor consisting of~~comprising a monitor decision element, an
EXOR-circuit and a logic circuit.